

3 DOTD's New Project Delivery Process

The people of Louisiana demand an accountable, speedy, and unobtrusive process to develop the state's transportation projects. In response to this public demand, DOTD has developed a new and streamlined Project Delivery process.

The public is also demanding that the Department look for solutions to issues important to the community. The public expects these issues to be addressed in harmony with traditional issues such as cost effective transportation, mobility, and safety. To meet this demand, DOTD will employ "context sensitive solutions" principles during all stages of the project delivery process. The extent of the application will depend on the complexity of the project and the importance of the issue to the community.

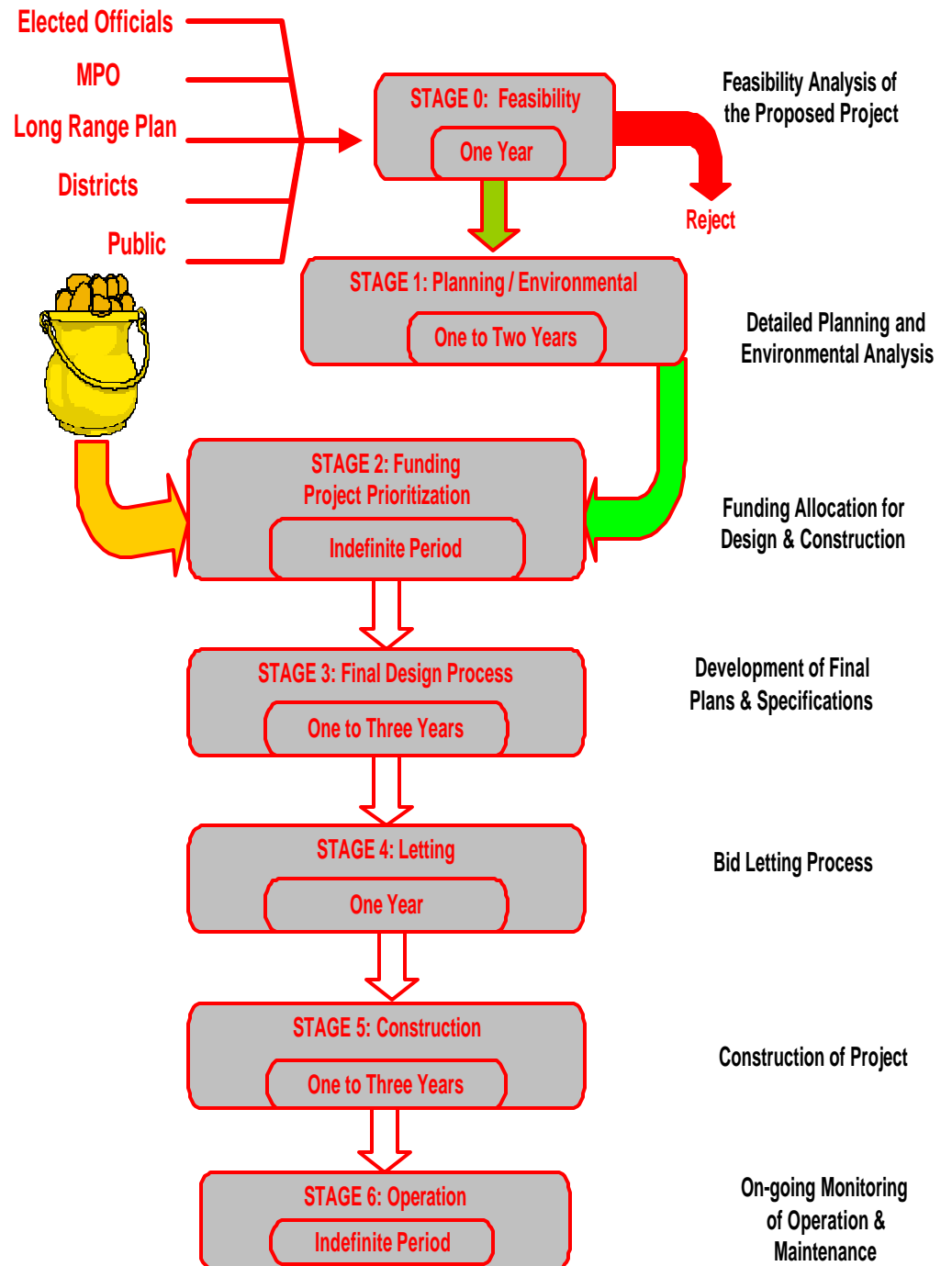
Context sensitive solutions are developed from an interdisciplinary approach to fitting projects into their physical setting while preserving community values, enhancing the natural environment, and maintaining safety and mobility. Context sensitive solution principles require designers to work with communities, resource agencies and local officials and to incorporate feedback from the communities to ensure the project meets their local needs. Context sensitive design principles encourage creativity and flexibility in the design of projects.

The Department's new project delivery process relies heavily on the principles of project management and profoundly alters the traditional DOTD business practices. The key element of the new process is its clear definition of stages in the project development process while placing responsibility for specific outcomes from each stage. The new process also demands accountability.

The central figure in this new process is the project manager (PM). In some cases, however, two project managers will be necessary—one from Environmental to lead the team through Stage 1 and one from Design to lead the team in Stage 3. The PM is responsible for organizing a team and carrying out the project development from planning to construction.

Figure 3-1 on the next page defines the seven stages of the project development process. The process starts by doing a feasibility study for a proposed project and ends by putting a completed project into operation and monitoring its performance to determine if the project's goal is achieved.

The following sections discuss activities to be performed in each stage and outline the team building procedures. Chapters 4 through 10 provide the standard operational procedures for each stage.



DOTD's New Project Delivery Process

Figure 3-1

3.1 Stage 0: Feasibility

Stage 0 determines the feasibility of a project. Once a project is proposed to be considered by DOTD, a feasibility analysis must be performed to determine if the project merits further consideration. A timely undertaking of Stage 0 is important, as the proposer of the project needs to be informed of the Department's decision. If the project is not to receive further consideration, good customer service policy dictates that the proposer should be informed of the decision as soon as possible, thus preventing the impression that the project will be implemented or that the Department is unresponsive.

The outcome of Stage 0 is a "go/no-go" decision regarding project advancement. A "go" project is deemed to be feasible and is selected through the Highway Project Selection Process to continue through the project delivery process. The "no-go" project is not selected through the process and will be retained for reconsideration in the future or will be dropped from further consideration. The basis for a "go/no-go" decision is founded on a series of analyses that include:

- 1. Preliminary Purpose and Need:** A preliminary description of the transportation problem or other needs that the proposed project is intended to address. Clearly addresses the question of who the project is serving.
- 2. Preliminary Alternatives and Initial Feasibility Analysis:** Develop conceptual alternatives considered technically feasible, including potential impacts analysis and discussion of project challenges.
- 3. Design Criteria and Initial Context Determination:** Identify preliminary basic design criteria, which may include functional roadway classification, design speeds, horizontal and vertical constraints, any required waterway, levee, or railroad clearances, and right-of-way and utility impacts.
- 4. Preliminary Environmental Review:** Identification of all known potential environmental "show stopping" constraints or issues that influenced early determinations of project feasibility, timing, and cost. Identification of major community issues impacted by the project during construction and operational phases of the project. May also serve as a preliminary analysis of the impact of the project on the state or region's economy. At this time, the project should also be reviewed in the context of value planning/value engineering and for constructability.

5. **Agency and Public Involvement Plan:** Indication of jurisdictional review agencies and interested public or private parties that expressed interest in the project, and other information relevant to the development of a public involvement plan in Stage 1.
6. **Preliminary Project Estimate and Budget:** Development of estimated costs for engineering design, right-of-way acquisition, utility relocations, construction, and environmental mitigation costs, in current year dollars.

It is anticipated that Stage 0 activities will not require assembly of a project team. Rather, the above outlined activities will be performed by the proposer or various sections within DOTD, depending on the nature of the project. Overall, the Office of Planning and Programming has the ultimate responsibility for Stage 0 implementation.

See Chapter 4 for details of the Stage 0 Standard Operating Procedure.

3.2 Stage 1: Planning and Environmental Process

Stage 1 takes a project through the planning and environmental assessment process. The outcome from Stage 1 will identify a preferred alignment for the project with a clear description of scope, budget, and major design features. From the environmental stand point, Federal-aid projects will be classified as an Environmental Assessment (EA) resulting in a Finding of No Significant Impact (FONSI), Environmental Impact Statement (EIS) resulting in a Record of Decision (ROD), or Categorical Exclusion (CE). For state-funded projects, the projects will be processed as an Environmental Exclusion (EE), Environmental Finding (EF), or Environmental Record (ER).

Stage 1 will culminate in an environmental closure (CE, FONSI, ROD, EE, EF, or ER) and a document named “Scope and Budget Memorandum” will be prepared for projects processed as FONSI, ROD, EF and ER. The Scope and Budget Memorandum that is signed by the Chief Engineer will include the following items:

- Description of the Project and Selected Alternative
 - Location, Preferred Alignment, and Major Design Features
 - Context-Sensitive Issues and Solutions
 - Value Engineering and/or Constructability Considerations
 - Maps and Exhibits, as necessary

- Funding for full project implementation
 - Estimates
 - Construction
 - Engineering
 - Real Estate Acquisition
 - Utility Relocation
 - Environmental Mitigation/Commitments
 - Traffic Management
 - Possible funding categories/mechanisms
- List of Commitments, Agreements and Permits
 - Commitments which need to be incorporated into the Plans, Specifications and Estimate (Stages 3 and 4)
 - Agency Agreements
 - Memoranda of Understanding
 - Memoranda of Agreement
 - Permits
 - Coast Guard (Section 9, General Bridge Act of 1946)
 - Corps of Engineers (Section 404, Section 10)
 - LA DEQ (Water Quality Certification and NPDES)
 - LA DNR (Coastal Use)
 - LA WL&F (LA Scenic Streams)
- Signatures
 - Recommendations
 - Project manager, Environmental
 - Project manager, Design
 - Overall Project Manager for selected projects
 - Approval
 - Chief Engineer, Office of Engineering

The decisions and project parameters documented in the Scope and Budget Memorandum cannot be changed in subsequent stages without the approval of the Chief Engineer.

See Chapter 5 for details of the Stage 1 Standard Operating Procedure.

3.3 Stage 2: Funding

Stage 2 deals with the programming of a project to proceed into Stage 3. A project reaching Stage 2 must have completed all Stage 1 requirements. The programming function is accomplished when a source of revenue is identified to provide for all associated Stage 3 and Stage 5 activities costs.

A project entering Stage 2 must have had a PM assigned to it in Stage 1. The assigned PM will be responsible to guide the project through Stage 2 and ensure that it is prepared for Stage 3.

If a project remains in Stage 2 for a long period of time (i.e., over three years with no action), National Environmental Policy Act (NEPA) documents may require reevaluation according to FHWA regulation 23 CFR 771.

There are three basic activities that must be conducted in Stage 2. They are:

- 1. Update of Cost Estimate Developed in Stage 1:** It is conceivable that a considerable period of time may have elapsed between the time a project completed Stage 1 and entered Stage 2. In such cases, it is prudent to perform and update all cost estimates. The components of such a cost estimate must include design, R/W, utilities, construction costs, and environmental mitigation.
- 2. Allocation of Funds:** DOTD projects are funded through a variety of sources such as federal funds, state funds, local funds, bond funds, etc. An important Stage 2 function is to allocate an appropriate amount of resources for completion of the project. This function will entail identifying means of finance, the amount of available funds, and the timing for the availability of funds. Obviously, these funding factors will have a direct effect on the delivery schedule of the project.
- 3. Establishing Project Delivery Date (PDD):** PDD is defined as the project design and development completion date. It is the date the project leaves Stage 3 and enters Stage 4.

In establishing a PDD, the project manager needs to have developed a feasible project schedule, have all task managers assigned, and have all funding allocation issues resolved. The PM must establish a Stage 3 project schedule that can be met by all concerned.

The establishment of PDD is a highly critical task. All Stage 4 activities will be based on the announced PDD. Earning public trust will directly depend on our success rate in meeting the established PDDs.

See Chapter 6 for details of the Stage 2 Standard Operating Procedure.

3.4 Stage 3: Final Design Process

Stage 3 is the design and development stage. By the time a project reaches this stage, the project must already have an assigned PM and a project team.

The prior established PDD will be the deadline for all Stage 3 deliverables. This deadline must be strictly adhered to. The deliverables from Stage 3 are:

1. Final plans including electronic formats
2. Plan QA/QC Documentation
3. Specifications and Proposal Package
4. All permits including railroad
5. All right-of-way acquired
6. Utility relocation agreements
7. Final cost estimates
8. Traffic management plan

See Chapter 7 for details of the Stage 3 Standard Operating Procedure.

3.5 Stage 4: Letting

Once a project is delivered to Stage 4, the project will be readied to be let for construction. DOTD's Project Control unit is responsible for Stage 4 implementation and will work with the PM to successfully let the project.

Stage 4 activities include:

1. Development of the final financial plan
2. Preparation of letting documents

3. Establishing a letting date with due consideration for:
 - Geographic distribution of construction projects
 - Providing for adequate competition among contractors
 - Maintaining level monthly letting amount
 - Other factors
4. Preparation and signing of the construction contract

See Chapter 8 for details of the Stage 4 Standard Operating Procedure.

3.6 Stage 5: Construction

This stage involves the construction process. Once a contractor is selected, DOTD's Construction Division, the district's Construction Engineer, the district's Project Engineer, and the PM will meet with the contractor to plan the job. It is expected that these entities will cooperate to identify all special project related issues and will resolve possible difficulties.

During the construction period, the district Project Engineer will take over the project management responsibility. However, the Project Engineer must keep the PM abreast of any special issues that may arise during the construction period. Any design-related plan changes must be communicated to the PM for information and input. The PM will accept responsibility for all design-related plan changes and should ensure consistency with the decisions and project parameters documented in the Scope and Budget Memorandum.

The basic activities in this stage are:

1. Establishment of construction process, milestone events, work schedules and timelines.
2. Implement environmental mitigation, if any.
3. Implement traffic control measures during the construction period.
4. Develop and implement a public information plan.

See Chapter 9 for details of the Stage 5 Standard Operating Procedure.

3.7 Stage 6: Operation

This stage deals with continuous monitoring of the project once it is placed in operation. Through a properly designed data collection and evaluation system, the utility of the existing project can be measured. This data will provide input for making modifications to design procedures to further improve the maintenance and operation of future projects.

See Chapter 10 for details of the Stage 6 Standard Operating Procedure.